



Wildix Configuration Guide: SIP Call Button

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CyberData Corporation

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Revision Information

- 10/7/2021 Initial Release
- 10/14/2021 Updated extension creation process.
- 11/10/2021 Updated screenshots and extension requirements.



Table of Contents

Table of Contents	. 3
1.0 Setup Diagram	. 4
2.0 Test Setup Equipment	
3.0 Before You Start	
4.0 Configuration Procedure: Extension creation	. 7
5.0 Configuration Procedure: Setting up the Paging Extension	11
6.0 Using the CyberData Call Button in a Wildix system.	
6.1 Setting the Dialout extension and loading an audio file	15
6.2 Load the Audio file	
7.0 Contact CyberData Corporation	19



1.0 Setup Diagram

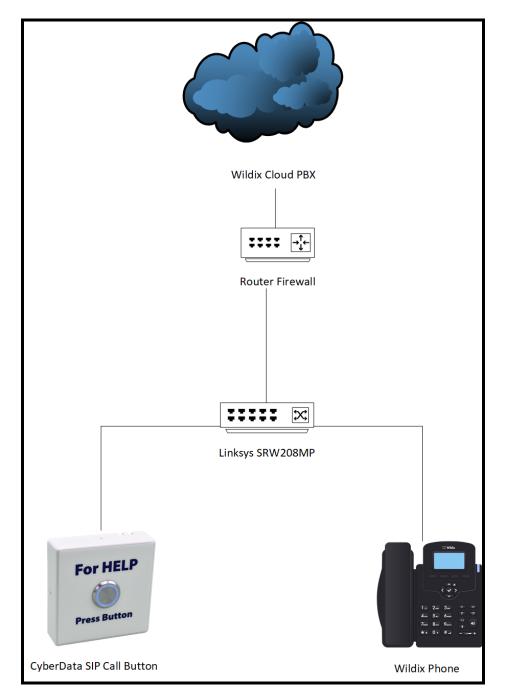


Figure 1-1: Interoperability Test Infrastructure



2.0 Test Setup Equipment

This section describes the products used for interoperability testing with Wildix.

Table 2-1: <u>Setup Equipment</u>

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION		
CYBERDATA SIP CALL BUTTON	011049	20.3.0		
CYBERDATA OUTDOOR SIP CALL BUTTON	011491	20.3.0		
LINKSYS SWITCH	SRW208MP			



3.0 Before You Start

This configuration guide documents the integration process of a CyberData SIP Call Button.

Network Advisories

Wildix uses a Fully Qualified Domain Name (FQDN) for the SIP server address. The CyberData SIP Call Button needs to perform a DNS A query to resolve the IP address of Wildix's SIP Server FQDN. It is necessary to ensure the configured DNS server(s) have an A record for the SIP Server address.

In addition, be sure to verify the following ports are available for the button to use:

- UDP 5060 (SIP)
- UDP 10500 (RTP)

The Call Button will need to traverse the public internet in order to operate with Wildix in the cloud.

The button's paging extension uses SIP port 5060 to receive SIP messages. The paging extension will send SIP messages to port 5060, the port used by Wildix's SIP Server.

SIP ports 5060 and RTP port 10500 are the default values on all noted firmware levels.

Alternatively, SIP ports for the paging extension are configurable on the **SIP** page of the web interface.

The CyberData Discovery Utility can be used to locate CyberData devices on your network. You may download it from the following web address: https://www.cyberdata.net/pages/discovery

Note: DHCP addressing mode is enabled on default on all noted firmware levels.

Product Documentation and Utilities

Before you start, download the Operation and Quick Start guides from the button's product webpage:

CyberData SIP Call Button (011049)

https://files.cyberdata.net/assets/011049/011049_931551C_SIP_Call_Button_Operations_Guide. pdf

CyberData SIP Outdoor SIP Call Button (011491) https://files.cyberdata.net/assets/011491/011491_931656C_SIP_Outdoor_Call_Button_Operations_Guide.pdf



4.0 Configuration Procedure: Extension creation

Note: Wildix requires a Wildix UC-Basic (simple intercom usage or Vision & Super Vision user) or Wildix UC-Essential (users who want to manage the intercom from Collaboration) to use CyberData products on the platform.

1. Log into Wildix at the provided URL.

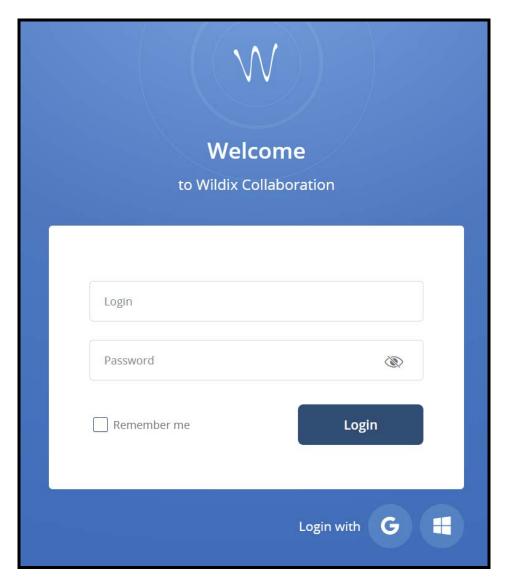


Figure 4-1: Log into Wildix



2. On the Users Menu page press the + button to add a new extension.

Jsers Groups Phonebooks Q Search														
Full Name Login Extension Fax Office Email Mobile Dialplan Fax dial Group Department License type														
6			admin	admin						internalc	internalc		Admin	
6			Rob		201		+16145552123			users	users		New	Premium
L			Todd		202		+16145552122			users	users		Old	Premium
6		ZD	Paul		203		+16144841530			users	users		Admin	Premium
L			Cyberdata		300					users	users		Admin	Premium
L			Yealink Phone		204					users	users		Default	Essential
L			CyberData Nightringer		301					users	users		Default	Essential

Figure 4-2: Users Menu

3. A pop-up to create the extension will appear.

	Figure 4	-3: Ex	tension	creation
--	----------	--------	---------	----------

Add		Х
	User V	
Full Name		
Login		
Extension		
Fax		
Office		
Email		
Mobile		
Dialplan	users (Internal dialplan)	
Fax dialplan	users (Internal dialplan)	
Language	En-us ∽	
Group	Default ∽	
Department		
License type	Essential ~	
	[Ok Cancel



- 4. Make sure the drop-down menu has User selected.
- **5.** Set the full name to the location of the call button.
- 6. Set the Extension Number desired for the device.

Note: Other values can be set, but for the purposes of this guide all other fields are left blank.

Figure 4-4: Filled Extension Popup

Edit		х
	User V	
Full Name	Cyberdata SIP Call Button	
Login		
Extension	300	
Fax		
Office		
Email		
Mobile		
Dialplan	users (Internal dialplan)	
Fax dialplan	users (Internal dialplan)	
Language	En-us 🗸	
Group	Admin 🗸	
Department		
License type	Premium ~	
	Ok	Cancel

- 7. After filling the values press **Ok** to create the extension.
- 8. After creating the extension, select it out of the list.



Figure 4-5: Extension created

se	rs Gr	oups Phonebooks									Q	Search	
		Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial	Group	Department	License type
	0	admin	admin						internalc	internalc	Admin		
	0	Rob		201		+16145552123			users	users	New		Premium
	•	Todd		202		+16145552122			users	users	Old		Premium
	e zo	Paul		203		+16144841530			users	users	Admin		Premium
	•	Cyberdata SIP Call Button		300					users	users	Admin		Premium
	•	Yealink Phone		204					users	users	Default		Essential
	0	CyberData Nightringer		301					users	users	Default		Essential

- 9. After selecting the extension, press Set Passwords.
- 10. Click on the Generate button for SIP/VoIP to create a password.

Figure 4-6: <u>Set Passwords Popup</u>

Set passwords		Х
WEB		Generate
SIP/VoIP	•••••	Generate Show

11. Click the show button and copy the auto-generated password which will be required in the next section.



5.0 Configuration Procedure: Setting up the Paging Extension

If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

CyberData Setting	Wildix Provisioning Pop-up
Primary SIP Server	SIP Domain
Primary SIP User ID	Extension Number
Primary SIP Auth ID	Extension Number
Primary SIP Auth Password	Password

|--|

1. Click Launch Browser from the CyberData Discovery Utility or point your browser to the CyberData device's IP address to access the Home Page of the web interface.

CD Discovery U	tility		_				
Cyber[VoIP Discover Utility					
IP Address	DHCP	MAC Address	Serial Number	Device Name			
192.168.1.16	Enabled	00:20:f7:03:fa:c9	049200200	Call Button			
Discover	Open Browser			Quit			

Figure 5-1: CyberData Discovery Utility

2. Enter the default credentials when prompted and click the Log In button.

Username: admin Password: admin



Figure 5-2: Home Tab

Home Device	Network	SIP SSL	Sensor	Audiofiles	Events	DSR	Autoprov	Firmware			
	Cyb	perDa	ata C	all I	But	ton					
Current Status		Admin S	Settings		Im	Import Settings					
Serial Number: Mac Address: Firmware Version: Partition 2: Partition 3:	049200225 00:20:f7:03:fc:e2 v20.3.0 v20.3.0 v20.3.0	Username: Password: Confirm Pass	admin ••••• word: •••••			oose File No f	ile chosen				
Booting From: Boot From Other Partition	partition 2	Save	boot Toggle He	lp	Ex	port Set	tings				
IP Addressing: IP Address: Subnet Mask: Default Gateway: DNS Server 1: DNS Server 2:	DHCP 192.168.1.17 255.255.255.0 192.168.1.1 192.168.1.1				Ex	port Config					
SIP Mode: Event Reporting:	Enabled Disabled										
Primary SIP Server: Backup Server 1: Backup Server 2:	Not registered Not registered Not registered										
Intrusion Sensor:	Triggered										

3. Navigate to the SIP tab.



Doc. 931888C Page 13

Figure 5-3: SIP Tab

Home Device M	letwork SIP SSL	Sensor	Audiofiles	Events	DSR	Autoprov	Firmware
0	CubarD			D 44			
8	CyberD	ลเล	Call	Dut	lon		
SIP Settings			Dial Out Se	ttings			
Enable SIP operation:			Dial out Extension:	204			
Register with a SIP Server:			Extension ID:	id204			
Primary SIP Server:	wildixstudent9.wildixin.com	<u>ן</u>	Send Multicast Aud				
Primary SIP User ID:	300		Multicast Address:	224 5 5 5			
Primary SIP Auth ID:	300		Multicast Port:	5050			
Primary SIP Auth Password:			Repeat Message:	1			
Re-registration Interval (in seconds): 360						
Backup SIP Server 1:		1	Call Discon	nection			
Backup SIP User ID:			Terminate Call after	delaur			
Backup SIP Auth ID:			ferminate can arter	ueray.			
Backup SIP Auth Password:							
Re-registration Interval (in seconds): 360		Audio Code	ec Selecti	ion		
Backup SIP Server 2:		1	Codec: Auto Select	~			
Backup SIP User ID:	-	- 1					
Backup SIP Auth ID:		-	RTP Setting	16			
Backup SIP Auth Password:		-					
Re-registration Interval (in seconds	360	_	RTP Port (even):	10500			
	<u></u> _		Jitter Buffer:	50			
Remote SIP Port:	5060		RTP Encryption (sR	(TP): Disabled	~		
Local SIP Port:	5060]	Save Reboot	Toggle Help	1		
SIP Transport Protocol:	UDP V		Save	loggie Heip			
TLS Version:	1.2 only (recommended)	~					
Verify Server Certificate:							
Outbound Proxy:		1					
Outbound Proxy Port:	0]					
Use Cisco SRST:	0						
Disable rport Discovery:							
Unregister on Boot:	<u> </u>						
Keep Alive Period:	10000						

- 4. Set the Primary SIP Server with the FQDN of the Wildix Server
- 5. Set the Primary SIP User ID to the extension number.
- 6. Set the Primary SIP Auth ID to the extension number.
- 7. Set the Primary SIP Auth Password to the auto generated password from the provisioning pop-up.
- **8.** Save.
- 9. Reboot.



After the reboot the Call Button should be registered with Wildix.

Figure 5-4: <u>Home Tab - Registered</u>.

Home Devi	ce Network	SIP SSL	Sensor	Audiofiles	Events	DSR	Autoprov	Firmware
	Су	berD	ata	Call	But	ton		
Current Statu	S	Admi	n Settings		Im	port Set	tings	
Serial Number:	049200200	Username	admin		Ch	oose File No	file chosen	
Mac Address: Firmware Version:	00:20:f7:03:fa:c9 v20.3.0	Password	:			port Config		
Partition 2: Partition 3:	v20.3.0 v20.3.0	Confirm P	assword:			port coning		
Booting From:	partition 2		Dataset T	- The last	E.	nort Sol	ttinge	
Boot From Other Partiti	ion	Save	Reboot Toggle	нер	_	port Set	ungs	
IP Addressing:	DHCP				E	kport Config		
IP Address: Subnet Mask:	192.168.1.28 255.255.255.0							
Default Gateway:	192.168.1.1							
DNS Server 1: DNS Server 2:	192.168.1.1							
SIP Mode:	Enabled							
Event Reporting:	Disabled							
Primary SIP Server: Backup Server 1:	Registered Not registered							
Backup Server 1: Backup Server 2:	Not registered							
Intrusion Sensor:	Triggered							



6.0 Using the CyberData Call Button in a Wildix system.

CyberData SIP Call Buttons are designed for sending a call to a phone or making an announcement. The button can call an extension number, ring group/call queue, or send multicast audio. When the call button is pressed it will make a call to the configured number and play a pre-recorded WAV File.

6.1 Setting the Dialout extension and loading an audio file

Once the call button is registered with Wildix, the Dialout extension will need to be configured and an audio file may be loaded to customize the message. The Dialout extension is set on the SIP tab.

SIP Settings		Dial Out Sett	tings
Enable SIP operation:		Dial out Extension:	204
Register with a SIP Server:		Extension ID:	John's Panic Button
Primary SIP Server:	wildixstudent9.wildixin.com	Send Multicast Audio	:
Primary SIP User ID:	300	Multicast Address:	224.5.5.5
Primary SIP Auth ID:	300	Multicast Port:	5050
Primary SIP Auth Password:	•••••	Repeat Message:	1
Re-registration Interval (in seconds)	: 360		
Backup SIP Server 1:		Call Disconn	lection
Backup SIP User ID:		Terminate Call after d	elay: 0
Backup SIP Auth ID:			
Backup SIP Auth Password:			
Re-registration Interval (in seconds)	: 360	Audio Codeo	c Selection
		Codec: Auto Select	~
Backup SIP Server 2:			
Backup SIP User ID:			
Backup SIP Auth ID:		RTP Settings	5
Backup SIP Auth Password:		RTP Port (even):	10500
Re-registration Interval (in seconds)	: 360	Jitter Buffer:	50
		RTP Encryption (sRT	
Remote SIP Port:	5060		
Local SIP Port:	5060		
SIP Transport Protocol:		Save Reboot	Toggle Help
TLS Version:	1.2 only (recommended)	~	
Verify Server Certificate:			
-			
Outbound Proxy:			
Outbound Proxy Port:	0		
Use Cisco SRST:			
Disable rport Discovery:			
Unregister on Boot:			
Keep Alive Period:	0		

Figure 6-1: Set Dialout Extension



6.2 Load the Audio file

CyberData devices require audio files in a specific format. The process to convert audio files to WAV format is covered in the operations manual for the SIP Call button

- Microsoft PCM
- 16 Bit
- Mono
- 8000Hz
- WAV format
- 1. After creating the audio file that will be used, load that file on the Audiofiles Tab.

Home	Device	Network	SIP	SSL	Sensor	Audiofiles	Events	DSR	Autoprov	Firmware
		Cy	be	rDa	ata	Call	But	τοη		
		Intrusion Senso	or Triggered	:Currently set	Available Spa	ce:1485MB				
		Door Ajar:		Currently set		se File No file cho	sen	Delete S	ave	
		Button Message	e:	Currently set		se File No file cho	sen	Delete S	ave	
		SIP Multicast M	essage:	Currently set		ose File No file cho	sen	Delete S	ave	
					Choo	se File No file cho	sen	Delete S	ave	

Figure 6-2: <u>Audiofiles tab</u>

2. Press the Choose File button, then select the audio file.



C Open			
🚱 🛇 🗢 📕 🕨 Libraries 🕨 Music 🕨 M	ly Music 🕨 Cyberdata ready music files 🕨 Distress Messages	▼ 4 ₇	Search Distress Messages 👂
Organize 🔻 New folder			ii • 🔟 🔞
 ★ Favorites Desktop Downloads Recent Places MAINFRAME TFTP-Root Firmware Images Interop Projects 2019 Tickets Libraries Documents Music Pictures Videos Kocal Disk (C:) Network 	Music library Distress Messages Name Distress-Message-Office102.wav	Ţ	Arrange by: Folder ▼
File name: Distress-	۲ المعالم المعا معالم المعالم ا	•	All Files (*.*) Open Cancel

Figure 6-3: Select the Audio file

3. Once the audio file is selected, press the save button to load the audio file.

Figure 6-4: Save File

Home	Device	Network	SIP	SSL	Sensor	Audiofiles	Events	DSR	Autoprov	Firmware
		Cy	be	rDa	ata	Call	But	τοη		
		Intrusion Senso	or Triggered	Currently set	Available Spa	ce:1485MB				
			, inggerea	.ourrently set		ose File No file chos	sen	Delete S	ave	
		Door Ajar:		Currently set	to: default					
					Cho	ose File No file chos	sen	Delete	ave	
		Button Message	e:	Currently set				_		
						ose File Distress-Me	esfice102.wav	Delete S	ave	
		SIP Multicast M	essage:	Currently set		ose File No file chos	sen	Delete S	ave	



4. Once the file is loaded, a press of the call button will trigger the message.

Figure 6-5: Loaded Audio File

Home	Device	Network	SIP	SSL	Sensor	Audiofiles	Events	DSR	Autoprov	Firmware		
	CyberData Call Button											
	Available Space:1485MB Intrusion Sensor Triggered:Currently set to: default											
	Door Ajar:		Currently set	t to: default		Choose File	No file chosen		Delete Save			
	Button Me	ssage:	Currently set	t to: Distress-N	/lessage-Office10	02.wav	No file chosen		Delete Save			
	SIP Multic	ast Message:	Currently set	t to: default			No file chosen		Delete Save			
						Choose File	No file chosen		Delete Save			



7.0 Contact CyberData Corporation

Sales

For sales-related questions, please visit our <u>Contact CyberData Sales</u> web page for more information.

Technical Support

For CyberData Technical Support, please submit a <u>Contact CyberData VoIP Technical Support</u> form on our website.

The CyberData VoIP Technical Support Contact form initiates a troubleshooting ticket which CyberData uses for quality assurance purposes.

Additionally, the Contact VoIP Tech Support form tells us which phone system you are using, the make and model of the network switch, and other essential troubleshooting information we need to efficiently assist with a resolution. Please also include as much detail as possible in the Describe Problem section of the form. Your installation is extremely important to us.

Documentation Feedback

We realize changes to the software or hardware of the Wildix PBX solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.